

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,178	12/06/2000	Steven D. Goedeke	P-8896	9273
<sup>27581</sup> MEDTRONIC,	7590 06/14/2007 INC.		EXAMINER ·	
710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924			OPSASNICK, MICHAEL N	
			ART UNIT	PAPER NUMBER
			2626	
			MAIL DATE	DELIVERY MODE
,			06/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	09/731,178	GOEDEKE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Michael N. Opsasnick	2626				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim  within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 9/23/	705.					
· <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-30</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) 1-30 is/are rejected.						
7) Claim(s) is/are objected to.	· ·					
8) Claim(s) are subject to restriction and/o	Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. ,						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	• • • • • • • • • • • • • • • • • • • •					
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign	priority under 35 ILS C & 119(a)	-(d) or (f)				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. ☐ Certified copies of the priority documents have been received.						
Certified copies of the priority documents		on No.				
3. Copies of the certified copies of the prior						
application from the International Bureau						
* See the attached detailed Office action for a list	, , , ,	d.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da 5) Notice of Informal P	ite atent Application (PTO-152)				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	6) Other:	atont Application (1 10-102)				

#### **DETAILED ACTION**

## **Drawings**

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

#### **Specification**

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### Claim Rejections - 35 USC 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1,4-9,13,15-22,24,26,27,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffery D. Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al (5761641).

Art Unit: 2626

Page 3

As per claims 1, 4-6, 9, 19, 20, 26, and 30, Snell teaches a system interfacing with an implanted medical device (col. 3, lines 61-65), with:

- microphone input of a voice command to a speech recognizer (col. 3, lines 5-7);
- the speech recognizer matching the input voice command to the subset of commands and converting the recognized voice command into a selection code (control program instructions, col. 4, line 5),
- said commands along with a set of control signals being stored in memory (col. 5, line 67 thru col. 6, line 2; col. 4, lines 5-6), and
- generating a control signal therefrom to execute the commands (col. 3, lines 9-13;
   col. 5, lines 4-6);
- a display device (col. 4, line 62); and
- displaying received data generated by the implanted medical device in response to
  the execution of the command as well as implanted medical device state data (col.
  4, lines 62-65 and col. 5, lines 3-13).
- interfacing with an implanted medical device (col. 3, lines 61-65), with a microphone input of a voice command to a speech recognizer (col. 3, lines 5-7); control program instructions, col. 4, line 5.

Snell does not explicitly teach displaying the selectable subset of commands as a function of the device. Rozak et al (5761641) teaches context-sensitive commands, and to display them for user selection by voice (or, of course, by keyboard or mouse) from a displayed menu (Rozak et al (5761641), Fig. 9, col. 3 line 55 – col. 4 line 19 -- commands are created that are context

specific and application specific). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Snell with context specific available commands because it would advantageously reduce user redundant activity by using context specific commands (Rozak et al (5761641), col. 1 lines 34-40).

As per claim 7, Snell teaches a pacing system analyzer (col. 4, lines 26-27 and 39).

As per claim 8, Snell teaches a programming unit adapted to interrogate and program the implanted medical device (col. 4, lines 62-64 and col. 5, lines 14-19).

As per claims 13, 24, and 27, Snell teaches adapting or configuring the speech recognizer and the processor for new commands or to a new user generating appropriate recognition data, to be stored in the memory arrangement (stored replaced command instructions and data to be used therefor, respectively, col. 5, lines 14-19 and col. 6, lines 6-9).

As per claims 15-17 and 22, Snell teaches an audio signal confirming the receipt of a voice selected command or device state to inform the user or for user confirmation (col. 6, lines 61-64; col. 7, lines 4-14 and 58-62; for suggestion of similarly outputting device state *cf.* col. 5, lines 7-9).

As per claim 18, Snell teaches medical data processing from the implantable device via a communications network (col. 5, lines 41-47).

Art Unit: 2626

As per claim 21, Snell teaches validating the stored command speech sets to see whether the voice command is understood (col. 9, lines 6-14).

5. Claims 2,3,23,29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffery D. Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al (5761641) in further view of Smith et al (5898459).

As per claims 2, 3, 23, and 29, the combination of Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al (5761641) does not specifically teach a bandpass amplifier to reject ambient background signals from the microphone. However, Smith et al (5898459) teaches band-pass filtering the ambient noises from a microphone input (Smith et al (5898459), col. 8 lines 50-53). Therefore, it would have been obvious to one of ordinary skill in the art of acoustic processing to modify the teachings of Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al (5761641) with bandpassing the signal from the microphone because it would advantageously remove unwanted ambient noise signals (Smith et al (5898459), col. 8 lines 53-58).

6. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffery D. Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al (5761641) in further view of Van Schnyndel (5940118).

Art Unit: 2626

As per claims 10-12, the combination of Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al (5761641) does not explicitly teach an unidirectional microphone to be steered by the user of his medical data processing instrument. However, Van Schnyndel (5940118) teaches using a steerable microphone system in the direction of the speaker (abstract). Therefore, it would have been obvious to one of ordinary skill in the art of microphonic structures to modify the combination of Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al (5761641) with directional microphone steering because it would advantageously improve upon the acoustical pickup of the speaker (Van Schnyndel (5940118), col. 1 lines 20-29).

7. Claims 14,25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffery D. Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al (5761641) in further view of Maes (6073101).

As per claims 14, 25, and 28, the combination of Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al does not teach explicitly teach validating the user to limit the various levels of commands that a user is authorized to give, however, Maes (6073101) teaches limiting the access/command control based on user authorization (abstract; col. 4 line 53 – col. 5 line7). Therefore, it would have been obvious to one of ordinary skill in the art of user control to modify the combination of Snell (U.S. Patent 5,792,204, issued August 11, 1998) in view of Rozak et al with user access control because it would advantageously allow for smoother security and access control (Maes (6073101), col. 1 lines 10-15) across a variety of applications (Maes (6073101), col. 2 line 64 – col. 3 line 10).

Art Unit: 2626

Page 7

### Response to Arguments

8. Applicant's arguments filed 9/23/2005 have been fully considered but they are not persuasive. As per the applicant's arguments stating "Snell does not include an interrogation of the IMD and a selection of a subset of commands by the programmer based on that determination.....to reiterate, Snell does not teach nor suggest that the programmer 32 interrogate the implantable device 30 to determine a state of the implantable device 30 and then select a subset of voice commands from a full set of available voice commands based upon this determination....At this point, Snell has simply discussed implantable devices and programmers in a general sense and has yet to introduce voice recognition....and has failed to consider the reference in its entirety", examiner disagrees and notes the referred to sections of Snell in the office action rejection above, and furthermore (considering the reference in its entirety), points to Snell (col. 5 line 50 – col. 6 line 10) explicitly teaching the use of voice commands, and voice recognition, to be used as a function of the device. Furthermore, quoting Snell in the 'Summary of the Invention' (col. 3 lines 1-8), "The present invention provides an implantable medical device programmer analyzer which is controlled using voice commands. In accordance with the present invention, the programmer-analyzer preferably recognized voice commands and uses the commands to control an implantable medical device, such as an implantable cardiac stimulating device, via a telemetry circuit" Examiner again emphasizes that Snell teaches the use of voice commands and voice recognition but does not explicitly teach displaying the selectable subset of commands as a function of the device, and that the Rozak et al (5761641) reference is used to

Art Unit: 2626

teaches context-sensitive commands, and to display them for user selection by voice (or, of course, by keyboard or mouse) from a displayed menu (Rozak et al (5761641), Fig. 9, col. 3 line 55 – col. 4 line 19 -- commands are created that are context specific and application specific). In other words, not only does Rozak et al (5761641) teach displaying the user selection, but also to limit the voice commands based upon the application and context. And therefore, the combination of the two references meets the current claim limitations. With respect to applicant's arguments that Rozak is non-analogous to medical device and medical device programmers, examiner argues that this point is moot because the commonality to the Snell and Rozak reference is the storage/usage of voice commands (that the Rozak method of managing and storing voice commands is an improvement of the Snell technique of handling voice commands, and that the modification to the Snell reference would improve the voice command/recognition storage by reducing redundancies, as cited by the Rozak reference). As per applicant's arguments on pages 9-22 of the response, examiner disagrees and notes that although the previous response did include the current claim scope of the instant invention, and then a general allegation that the reference did not teach the claim scope, the responses by applicant did not include a compare/contrast between the claim scope and the references used in the rejection, other than a general allegation that the references did not teach the claim scope. Examiner notes that such arguments have been presented in the response dated 9/23/05.

Art Unit: 2626

Page 9

**Conclusion** 

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Opsasnick, telephone number (571)272-7623,

who is available Tuesday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mr. Richemond Dorvil, can be reached at (571)272-7602. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mn

primary examiner

AU2626

06/10/07